CLAIMS:

1. An aircraft arrangement of self-propelled Mini or Micro UAV comprising a fore wing and an aft wing in tandem close-coupled arrangement, wherein said aft wing has side panels and control surfaces, and tapered planform with positive sweep, said fore wing has non-positive trailing edge sweep, the fore and aft wing being disposed at different height, and said arrangement being free of additional wings or tail arrangement.

2. The aircraft arrangement of Claim 1, wherein said fore wing has straight trailing edges with negative sweep angle.

3. The aircraft arrangement of Claim 2, wherein said fore wing has negative sweep.

4. The aircraft arrangement of Claim 1, further comprising a fuselage.

5. The aircraft arrangement of Claim 4, wherein said fore wing is mounted on the upper side of said fuselage on at least one pylon.

6. The aircraft arrangement of Claim 5, wherein said fore wing is disposed higher than said aft wing at least by the length of an average aft wing chord.

7. The aircraft arrangement of Claim 1, wherein said fore wing and said aft wing partially overlap each other.

8. The aircraft arrangement of Claim 1, wherein said tandem arrangement has overall width W and overall length L including any control surfaces of said UAV, and the sum of planform wing areas of said tandem arrangement is at least 70% of the product W x L.

9. The aircraft arrangement of Claim 1, wherein the forewing, the aft wing and other elements of said UAV are disposed so as to provide longitudinal aerodynamic stability.

10. The aircraft arrangement of Claim 9, wherein said arrangement has positive pitching moment at zero lift.

11. The aircraft arrangement of Claim 1, wherein at least one of said aft wing and said fore wing has rounded tips.

12. The aircraft arrangement of Claim 1, wherein at least a portion of the trailing edge of said aft wing has negative or positive sweep angle.

13. The aircraft arrangement of Claim 1, wherein said aft wing has aspect ratio between 2.5 and 4.

14. The aircraft arrangement of Claim 1, wherein said fore wing has aspect ratio between 3 and 5.

15. The aircraft arrangement of Claim 1, wherein planform areas of the aft wing and the forewing are in ratio between 2:1 and 1:1.

16. The aircraft arrangement of Claim 1, wherein said aft wing has rudder control surfaces on its side panels.

17. The aircraft arrangement of Claim 1, wherein said fore wing has side panels.

18. The aircraft arrangement of Claim 17, wherein said fore wing has rudder control surfaces on its side panels.

19. The aircraft arrangement of Claim 1, wherein said fore wing has control surfaces.

20. The aircraft arrangement of Claim 1, wherein said self-propelled UAV has a tractor propeller mounted in front of said tandem arrangement.

21. The aircraft arrangement of Claim 1, wherein at least one of said fore wing and said aft wing has non-zero dihedral angle.

22. The aircraft arrangement of Claim 21, wherein the dihedral angles of the fore wing and of the aft wing are such that the vertical distance between tip chords of said fore wing and said aft wing is greater than the vertical distance between their respective root chords.

23. The aircraft arrangement of Claim 1, wherein said aft wing has twist.

24. The aircraft arrangement of Claim 1, wherein said fore wing has twist.

25. The aircraft arrangement of Claim 1, wherein said aft wing has positive angle of incidence.

26. The aircraft arrangement of Claim 1, wherein said aft wing has airfoil sections with positive zero lift pitching moment.

27. The aircraft arrangement of Claim 1, wherein the forewing, the aft wing and other elements of said UAV are disposed so as to provide longitudinal aerodynamic instability.

28. The aircraft arrangement of Claim 27, wherein said self-propelled UAV has a pushing propeller mounted after said tandem arrangement.

29. The aircraft arrangement of Claim 27 having negative pitching moment at zero-lift.